



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,784	03/21/2006	Jochen Wehner	WEHNER1PCT	9555
7055 7590 12/02/2010 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER LEONARD, MICHAEL L	
			ART UNIT 1763	PAPER NUMBER
			NOTIFICATION DATE 12/02/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No. 10/572,784	Applicant(s) WEHNER, JOCHEN	
	Examiner MICHAEL LEONARD	Art Unit 1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/22/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claim 22-25, 28-41, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,340,652 to Sondhe et al. in view of U.S. Patent No. 5,895,806 to Gajewski for the reasons set forth in the last Office action.

Claims 26-27 and 42 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S Patent No. 5,340,652 to Sondhe et al. in view of U.S. Patent No. 5,895,806 to Gajewski et al. that has been explained above and is applied here as such in view of U.S. Patent No. 3,217,536 to Motsinger et al. for the reasons set forth in the last Office action

Response to Arguments

Applicant's arguments filed 09/22/2010 have been fully considered but they are not persuasive.

The applicants' argued that the combination of references disclosed above does not render the presently claimed invention prima facie obvious for the following 5 reasons:

1) Firstly, the secondary reference to Gajewski fails to disclose a polyurethane formed from an aromatic polyisocyanate because Gajewski discloses that the aromatic polyisocyanate is in the form of a NCO-terminated polyurethane prepolymer, which the applicants' strongly feel are two totally different reactants.

2) Secondly, one of ordinary skill in the art would not look to replace the polyurethane of Sondhe with the polyurethane of Gajewski because of the additional step of forming the polyurethane prepolymer, which is an extra step not disclosed by the Sondhe reference.

3) Thirdly, one of ordinary skill in the art would not even know in the epoxy base coat of Sondhe is compatible with the polyurethane composition of Gajewski even though the examiners' relied upon experience in the field suggested otherwise. The applicants' cited U.S. Patent No. 4,571,798 to show that the polyurethanes are only applied to metal rolls and not metal rolls with epoxy bases.

4) Fourthly, the applicants' argued that the claims 25 and 43 are not met by the combination of references because Sondhe clearly discloses that the epoxy is the base coat and the urethane is the top coat.

5) Finally, the applicants' argued that the addition of Motsinger does not render claims 26, 27, and 42 prima facie obvious in view of the above references.

With regards to the issue 1), Gajewski discloses a polyurethane composition that can react, mixed, and applied at ambient temperatures and that can be applied to the substrates to be coated without the need for molds (Column 4, lines 60-66) comprising

Art Unit: 1763

the reaction product of an a) isocyanate-terminated polyurethane prepolymer and b) a curative agent comprising a polyol, an aromatic diamine, and an aliphatic amine. The isocyanate-terminated prepolymer is the reaction product of aromatic polyisocyanates and polyols. The examiner understands the difference between prepolymers and polyisocyanates, however the all reaction components are present and the fact that Gajewski first formed a prepolymer would not effect the final polyurethane composition as a whole. Further, the claims disclose the same 3 reactant products as Gajewski and the fact that Gajewski reference discloses that a first NCO-terminated prepolymer is formed first does not render the presently claimed invention unobvious. Also, the Sondhe reference discloses intermediates such as isocyanate prepolymers that can be formed during the process, which is then further chain extended, much in the same manner as the Gajewski reference (See Column 21, lines 15-20).

Essentially component (A) of the claims is not limited to only polyol and amine and component (B) is not limited to just polyisocyanate. A person of ordinary skill in the art would understand that even though Gajewski discloses the formation of NCO-terminated prepolymer, he did not disclose the elimination of unreacted isocyanate and as such the unreacted isocyanate should still be present in the (B) side of Gajewski.

With regards to issue 2), Sondhe reference discloses intermediates such as isocyanate prepolymers that can be formed during the process, which is then further chain extended, much in the same manner as the Gajewski reference (See Column 21, lines 15-20). In other words, when all the reaction components are put together there

Art Unit: 1763

will be NCO-terminated urethane prepolymers formed no matter the addition of reactants, especially when the polyisocyanates are used in excess.

With regards to issue 3), the applicants' pointed to one of the 4 references disclosed by the Gajewski reference to show that only metal rolls are covered with the polyurethanes and not metal rolls not metal rolls with epoxy bases. The examiner would like to point the applicants' attention to 2 of the other references, in particular U.S. Patent No. 3,520,747 to McGaughey, Columns 5 and 6 and U.S. Patent No. 3,646,651 to McGaugher, Column 5 (bottom) and 6, which disclose the addition of polyurethane topcoats onto metal rolls already covered with epoxy bases. Therefore, the examiners' previous position with regards to the Gajewski polyurethane being compatible with the Sondhe epoxy resin is maintained.

With regards to issue 4), Sondhe's invention is related to epoxy base coats and polyurethane topcoats, however, Sondhe discloses because epoxy compositions have good bonding strength, it is generally utilized as a base or substrate interface layer. This language suggests that the epoxy layer can also be used a top-layer, much in the same way as the polyurethane layer. The suggestion to use it as top layer is evidenced by Sondhe (Column 13, lines 5-7), which suggests other uses of the epoxy layer dependent upon the application.

With regards to issue 5), Motsinger was brought in to show the added effects of adding reinforcing materials to the epoxy resin and the motivation to do would be It would have been obvious to a person of ordinary skill in the art to combine the fiberglass laminated epoxy of Motsinger with the composition of Gajewski and would

Art Unit: 1763

have been motivated to do so for such desirable properties as to provide strength and weather protection (Motsinger, Column 4, and lines 1-14). Furthermore, the references incorporated by Gajewski further disclose the addition of reinforcement material in the epoxy resin, which the applicants' overlooked.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LEONARD whose telephone number is (571)270-7450. The examiner can normally be reached on Mon-Fri 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 1763

/MICHAEL LEONARD/
Examiner, Art Unit 1763